

Teleworking for the Office of Human Resources

Carla Harkness

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Budgetary reductions have led to a need to reduce the amount of space used by the Budget and Control Board. The Office of Human Resources (OHR) is currently located in two physical locations. The Talent Acquisition and Development area is located at 1401 Senate Street where there are three classrooms dedicated to training and each employee has her own office. The Human Capital Management area is located on the eighth floor of the Capital Center Building at 1201 Main Street where there is a large conference room, a small conference room, and each employee has their own office. OHR will be combining these two locations into one at the South Carolina Department of Archives and History at 8301 Parklane Road. Employees will be moving from large offices to cubicles. There are 33 total employees within OHR.

The use of cubicles will allow OHR to reduce the cost of leased office space by \$127,789 per year, which results in a substantial cost savings for the office. In addition to cost savings, the use of cubicles has an open format that ensures that everyone is constantly available. According to the online business journal *Knowledge@Emory*, the open seating format has also been shown to encourage employee interaction which could spur creativity; however, it does have some limitations. The open format of the cubicle increases the flow of noise and other distractions, and can disrupt concentration and reduce productivity. Teleworking may be a solution that allows for a reduction in space with increased productivity.

Teleworking is working at home and being linked to customers, clients and the employer by the means of telecommunications, such as computers and telephones. According to the American Community Survey, teleworkers accounted for 3.2 percent of the workforce in 2000, 3.5 percent in 2003, and 3.9 percent in 2006. According to the research firm of Gartner Inc. as

reported by Wendell Cox, more than 23 percent of our nation's work force worked from home at least one day per month in 2005. In the Federal Government, Congress mandated agencies to adopt telework to both support work/life balance and also to provide a way to alleviate traffic congestion and to reduce vehicle emissions. As a result, Congress established Public Law 106-346, which requires Federal agencies to establish and promote telework programs for eligible employees. The total number of federal teleworkers increased from 94,643 in 2007 to 102,900 in 2008, and 48 of the 78 federal agencies that reported their telework statistics say they have more people teleworking than a year ago, according to the Office of Personnel Management (OPM) report to Congress titled, "Status of Telework in the Federal Government." John Berry, OPM director, wrote that telework has many important implications. For instance, working from home can stave off possible pandemics of influenza and allow operations to continue in case of an emergency. However, OPM also found nearly half of the 78 agencies haven't fully integrated telework into their continuity of operations plans. Participating agencies also told OPM that working from home helps their employees. The greatest benefit was to employees' morale, according to the participating agencies. Their productivity and transportation were the other highest benefits.

Teleworking has proved to be an effective method for reducing costs, mostly associated with the amount of office space that is no longer required. Teleworking has other advantages for the employer such as: helping attract best candidates and retain good employees; easily accommodate employees; improve employee morale; allow for business as usual during times of emergencies; and increased productivity, as reported by the Telework Exchange.

As reported in the SC OHR Weekly Podcast from April 7, 2010 relating to whether employees who suffer from scent allergies are considered disabled under the Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), allowing an employee to “telework” or telecommute is an option that employers may want to consider in providing accommodations. The podcast also states that while courts have held that an employer is not required to allow an employee to telecommute, advances in technology continue to make it harder for employers to demonstrate that allowing an employee to “telework” or telecommute presents an undue hardship. Teleworking addresses other key public policies in addition to the ADA, such as the Federal Clean Air Act and the Family and Medical Leave Act.

Teleworking is also reported to increase worker productivity anywhere from 10 to 50 percent for individual businesses because of a reduction in employee absences and time lost to traffic delays. Some of this increase may have resulted from individuals working more hours due to a flexible schedule, and some was due to workers becoming more efficient. The Arizona Health Care Cost Containment System (AHCCCS) introduced its virtual home office program in 2006 and the productivity of participating workers increased by 33 percent. According to a study conducted at the Georgia Institute of Technology of private sector teleworking in 2007, 97 percent of workers and 87 percent of employers reported increases in productivity.

The use of teleworking is also important in addressing public policy objectives, such as containing the growth of traffic congestion and reducing greenhouse emissions. Most urban traffic congestion occurs during peak travel hours when people commute to and from work, and this congestion could be reduced if car trips were reduced by an increase in teleworking.

As for the reduction of greenhouse emissions, any vehicle trip eliminated by teleworking would provide an immediate environmental benefit. Telework Exchange research found that the average employee who commutes 5 days a week disperses 8 tons of pollutants into the environment each year. Teleworking achieves greenhouse emission reductions at virtually no cost. A study conducted by the U.S. Department of Energy estimated that teleworkers saved 840 million gallons of gasoline and reduced carbon emissions by almost 14 million tons in 2008, as reported by Wendell Cox. Nationwide, 40,250 tons of air pollution per year could be avoided if all state service employees teleworked three days per week.

Employees benefit from teleworking by having increased flexibility in balancing work and home needs, reduced stress from reduced commuting problems, and financial savings related to automobile maintenance, gasoline, and clothing expenses. On an annual basis, the gross amount of time gained by full-time teleworking can range from 6 to nearly 13 full days (24 hours) in time per year, according to Ted Balaker, a policy analyst at the Reason Foundation who has authored studies on urban policy and workplace issues.

Coming to the office for meetings and in-person collaboration is still important, however, most OHR employees do not need face-to-face interaction daily. Specifically, for OHR consultants, the agencies that are consulted with do not regularly receive face-to-face interaction and would be unaware of the seamless transition to "alternative officing" or teleworking. Employees of OHR need access to the network servers which house shared documents and their individual files. The Human Resources Information System (HRIS) is in the process of being phased out with the implementation of the South Carolina Enterprise

Information System (SCEIS) and will have limited usage, therefore, employees should not need to access the system remotely. The SCEIS and the NEOGOV e-recruitment system are both web based and employees will have access to these systems with any internet connection. Options that have been considered for remote access include a Virtual Private Connection, a Citrix Application, and Novell NetStorage.

A VPN (or Virtual Private Connection) allows the connectivity of remote users to the organizational network. By means of a secure, encrypted "tunnel" to the private network, a user is able to connect to the network as if that user was directly linked to the network itself, which would include access to network servers, HRIS and some programs available on the employee's work computer. A VPN connection allows organizations to securely connect multiple remote sites and users to a centralized network through a public network such as the Internet. VPN connections are encrypted and authenticated through workstation and VPN software at each endpoint. For this method of remote access a VPN device should be located inside the organization's network. In addition to having the VPN a Windows server needs to exist within the trusted network to use terminal server technology. You can log into and can handle as many concurrent connections as you are licensed with Microsoft. OHR employees would need to connect to the VPN, log into the terminal server, and get the information they need then disconnect from the VPN. The desktop that the user sees will not be the same desktop that he sees at his office PC, but rather the desktop of the Terminal Server. See Appendix A for instructions on using the VPN.

The Citrix Application for a remote access solution would enable OHR to securely access corporate Windows® applications and files from anywhere at any time. Users would experience seamless and consistent application access, whether on the Local Area Network (LAN), or at an outside location with just an Internet connection. Applications are securely stored on a central server and delivered to users. Role-based user access ensures data security with central control over user access to applications, as well as printing and storage rights.

Novell NetStorage provides simple Internet-based access to file storage. It acts as a bridge between an organization's protected Novell network and the Internet, giving users secure file access from any Internet location. Files and folders on a NetWare server can be accessed with a web browser and the same mapped drives that they see at work are available with this product. No Novell Client software is required. As explained by Novell Systems Engineer, Bill Calero, users can securely access files from any Internet Protocol (IP)-enabled machine via SSL (Secure Socket Layers) and HTTPS (Secure HyperText Transfer Protocol).

Once NetStorage is installed, users can upload, download, copy, move, rename, delete, read, and write files between a local workstation and a NetStorage network place. In addition, NetStorage offers the following features as reported by Bill Calero of Novell:

- It has the ability to process a user's container, profile, or user login script for drive mappings.
- It honors eDirectory/NDS Group memberships for drive mappings.

- It supports contextless and context-based logins into eDirectory. This provides users the capability to log in using their short name (JDoe) or a Fully Distinguished Name (JDoe.NY.Novell).

When users authenticate via NetStorage, their container login script will be processed and their drive mappings will appear on a Web page in the form of folders. For example, a user's home drive mapping of "map h:=server1\vol1:users\username" in the login script will appear on the Web page as a folder named "HOME@H".

Users can access their data with NetStorage via an HTTPS URL in a browser in the form of https:// followed by either the IP address or the DNS name of the NetWare 6 server where you installed NetStorage, and then ending with "/NetStorage/" (see Figure 1).

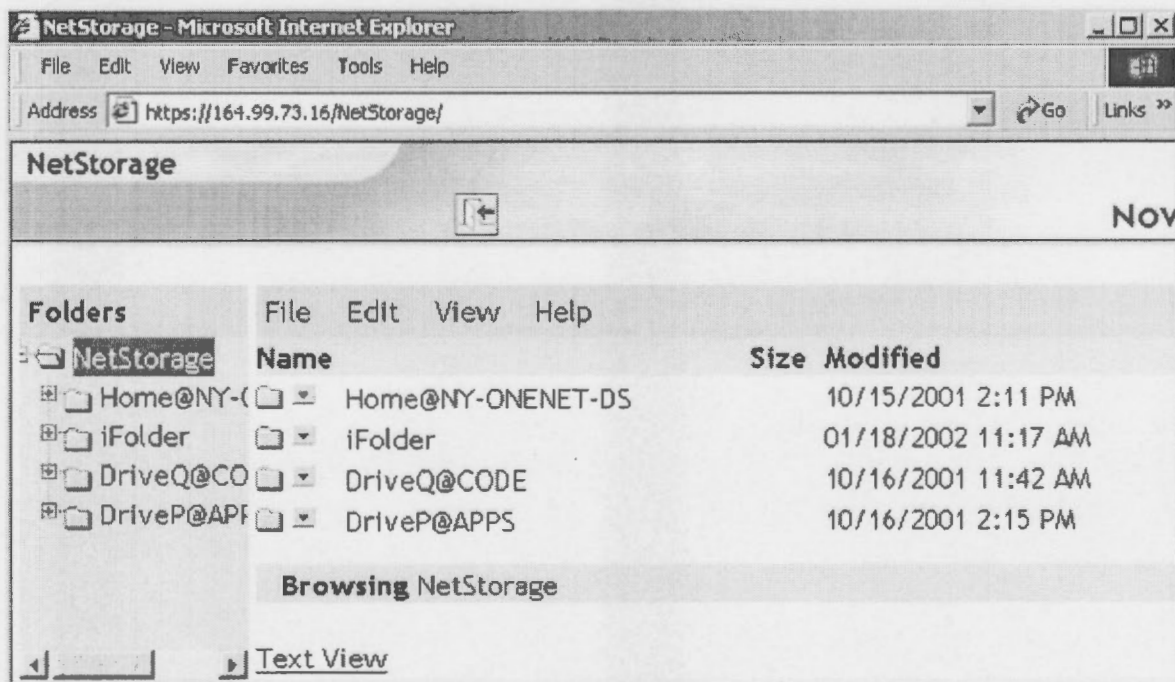


Figure 1 - NetStorage data access via a Web browser.

Notice the folder names-they reflect the drive letters based on the mappings in the user's login script.

The prospect of using a VPN was eliminated based upon the cost of a dedicated server and the limitations in access based upon running the connection through a computer. The Citrix Application option for remote desktop access through the web was immediately eliminated based upon the cost associated. Novell NetStorage and utilization of the Blue Zone for HRIS access are identified as the best option.

Requirements for participation

Participation in the teleworking program is voluntary. Employees must have received a "successful" rating or better on their Employee Performance Management Evaluation, have completed their probationary period and be in a Full Time Equivalent position. There are some administrative positions that will not be eligible for teleworking due to the requirements of the position, and the final decision regarding these positions will be made by the State Human Resources Director. The ability to telework is a privilege and can be revoked at any time based upon performance discrepancies or misconduct.

Ideally, employees would be issued a laptop for use in the teleworking program. Based upon budgetary constraints, the purchase of additional laptops is not an option at this time. Participation in the teleworking program will require employees to have access to certain equipment at home until OHR replaces the current computers with laptops through attrition. Employees will need the following:

- A computer

- High-speed Internet Connection
- Microsoft Office
- Telephone
- AVG anti-virus protection

Office phones will be forwarded to personal phones, either home or cellular.

AVG has been a major provider of free anti-virus protection for a number of years. 110 million people around the globe rely on AVG to protect them while they're online or offline. Sam Jones, Board CIO, has said that, "AVG is a viable option for personal use." PCMag.com and CNET have endorsed the use of the free AVG anti-virus protection.

OHR employees must download the AVG Anti-Virus Free Edition 9.0 to their personal computers in order to use them for teleworking. The anti-virus software also provides automatic updates to keep the protection current and it's compatible with Windows XP, Vista, and Windows 7. AVG LinkScanner® is a component of AVG Anti-Virus Free Edition 9.0 and analyzes every website behind every link clicked or typed into an Internet browser. LinkScanner® informs the user if the webpage you are visiting is safe before the webpage is accessed. LinkScanner® works in real-time for 24 hours per day/7 days per week/365 days per year.

Schedule of Office Coverage

All employees are required to work in the office one day per week for ease in scheduling employee meetings and giving employees the ability to interact and share ideas. The schedule

in Figure 2 illustrates that there is Managing Partner available on every day of the week, as well as employees from each OHR area. In Figure 2, Tuesday is shown as the day all employees are required to be in the office in order to give a complete sample of a teleworking schedule.

Employees from the Human Capital Management (HCM) area and the Talent Acquisition and Development (TA&D) area are scheduled for each additional weekday, allowing for in-office coverage during all normal business hours.

Monday	Tuesday	Wednesday	Thursday	Friday
HCM Managing Partner 1	All Employees	HCM Managing Partner 2	HCM Managing Partner 3	HCM Managing Partner 4
HCM 1		HCM 2	HCM 3	HCM 4
		HCM 5	HCM 6	HCM 7
TA&D Managing Partner 1		TA&D Managing Partner 2	TA&D Managing Partner 3	TA&D 1
TA&D 2		TA&D 3	TA&D 4	TA&D 5
TA&D 6				

Figure 2 – Sample Teleworking Schedule

Employees that are on a flexible work schedule will maintain this work schedule, with some additional guidelines. Employees may not schedule their additional in-office day on their regular flex day because they would then be in the office only one day every other week.

Meetings, such as mediations, arbitrations, and face-to-face meetings with agency contacts will be scheduled based upon working time availability. Working time would include teleworking days. When scheduling meetings, the employee should try to accommodate the other party. It will not be acceptable to only offer available meeting days and times as those that the employee is schedule to be in the office. If a meeting is scheduled on a day the

employee normally teleworks, the telework day will not be moved to another day. Normal business activities are expected to continue to ensure a seamless transition.

Cost to OHR

The cost to OHR is limited as shown in the list below.

- Computer – none
- Novell NetStorage - none
- Telephone – none
- Antivirus protection – none

Once the use of teleworking is considered successful and integrated as part of the normal work environment, another review of the remote connectivity may be required. In the event that OHR determines that a VPN option would be more effective, a cost would be associated with purchasing a dedicated server. It may also be decided that when computers are in need of replacement, laptops and docking stations would be a better option to support the continued use of teleworking, and a phone allowance for teleworking employees would assist in offsetting the employee cost of having phone lines forwarded to cellular phones, allowing employees to receive phone calls from any location at any time.

Expectation of employees

Employees working from a remote location are expected to answer all phone calls or return phone messages as if they were sitting in their cubicle at the Archives and History

Building. The employees are also expected to be available, at a minimum, during their regularly scheduled workday.

SCEIS service desk tickets assigned to employees must be completed in a timely manner.

The service desk system tracks the time the employee took to respond to the ticket.

The turnaround of actions is expected to be the same or better as compared with the last two fiscal years. The number of actions, average response time in days and the weighted average for each type of action is shown by fiscal year in the tables below. Any delay in processing actions must be explained.

Activity Log Totals for Fiscal Year 2008-2009			
Description	Number of Actions	Average Response in Days	Weighted Average
Administrative Supplement	65	3.4	0.10
Exceptional Pay	46	2.15	0.04
Equivalencies	114	2.88	0.14
Hire Above Midpoint	305	2.54	0.34
Special Pay	44	12.02	0.23
Temporary Salary Adjustment	179	2.19	0.17
Temporary Salary Adjustment - Extension	73	2.75	0.09
Update	836	5.36	1.95
New Position	31	5.74	0.08
Reclassification	591	4.58	1.18
Total	2284		5.43 Days

Activity Log Totals for Fiscal Year 2009-2010

Description	Number of Actions	Average Response in Days	Weighted Average
Administrative Supplement	32	8.91	0.23
Exceptional Pay	37	1.73	0.05
Equivalencies	122	2.44	0.24
Hire Above Midpoint	239	3.01	0.57
Special Pay	42	5.69	0.19
Temporary Salary Adjustment	52	1.37	0.06
Temporary Salary Adjustment - Extension	39	4.41	0.14
Update	392	4.44	1.38
New Position	3	1.00	0.00
Reclassification	298	2.89	0.69
Total	1256		3.55 Days

Implementation Plan

Prior to implementation, the plan will be communicated to all OHR employees. Any eligible employee who wishes to not participate in the program will be able to opt out at this time. The telework schedule will then be determined in conjunction with the Managing Partners and the State Human Resources Director, with preference of days given based upon seniority. Integration of the teleworking process will also be integrated into any Standard Operating Procedures.

Two weeks prior to implementation, Key Stakeholders and Customers will be informed of the change with the assurance that the change will be seamless. An explanation of the

process will be given to these Key Stakeholders and Customers in order to demonstrate that OHR employees will have the same access to assist them regardless of their remote location which will allow for better and quicker customer service. No longer will Key Stakeholders and Customers have to wait for assistance from OHR employees because they are out of the office for any reason. In order to assist OHR with the transition, actions that have previously been faxed should be scanned and e-mailed to OHR employees in order to ensure a faster responses time. Key Stakeholders and Customers will also be notified that a customer satisfaction survey will be sent to them six months after the date of implementation to ensure that their needs are continuing to be met.

Week one of implementation will allow participating employees to work from home only one day this week. Week two will allow participating employees to work from home two days. In week two, a meeting will also be held on the day that everyone is in the office to discuss the teleworking process and identify any issues or concerns. Week three will allow participating employees to work from home all three days. In week three, another meeting will be held on the day that everyone is in the office to again discuss the process and identify any issues or concerns.

Evaluation

Evaluations of the effectiveness of the teleworking program will be based upon the turnaround of actions, customer feedback and employee feedback. Employee feedback will include an evaluation of any extra effort on the part of the IT support personnel to provide support to teleworkers. Based on activity log data, the number of days required for turnaround

of actions should be consistent with the previous years or better. The activity log data will be reviewed every six months. Service desk tickets will be reviewed to evaluate the time OHR employees are taking to close the tickets. After three months of teleworking, an evaluation with staff will be completed during a meeting. All staff will be able to identify issues and concerns and discuss continuation of the program. After six months of teleworking, another evaluation with staff will be completed. In addition, the customer satisfaction survey will be sent to all Key Stakeholders and Customers. The survey will not focus on the teleworking process, as it should be seamless to them. The focus of the survey will be on the service provided to them by OHR. Questions will focus on results such as response times for actions, availability of employees, and their general satisfaction with the services they are receiving.

Recommendations for future actions

Upon review of the 3 month evaluation, the six month evaluation and the six month customer satisfaction survey, the Office of Human Resources will review the effectiveness of the teleworking program. If teleworking is to continue, a review of the processes will be conducted to evaluate their effectiveness and if any improvements need to be made. The schedule will be evaluated for effectiveness and coverage. The procedures surrounding the processing of actions and the Standard Operating Procedures will be reviewed to determine if changes are warranted. The remote access option will be evaluated and a determination made on the purchasing of a dedicated server if the decision is made that a VPN would be more effective. An evaluation of the computer equipment must be conducted and a determination made as to whether the office can begin to purchase laptops and docking stations. A study of

the phone forwarding and the addition of a phone allowance will need to be conducted. Any costs associated with the continuation of the teleworking program will be evaluated. Once the review and evaluations have been concluded a determination will be made as to whether teleworking should be implemented as a permanent flexible work option.

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Appendix A

Remote Access to Network Resources

The following information explains how users of the BCB network should connect to the remote access server located in the Southtrust building to gain resources to network files and applications.

First you will need to establish an internet connection from where you are working. This could be a wired connection such as Time Warner, a wireless connection or a dialup connection. ***Please make sure that you have a connection to the internet before proceeding.***

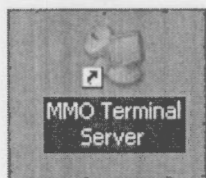
The first step is to open the desktop program named "Watchguard Firebox SSL" on your desktop. The shortcut should look like below:



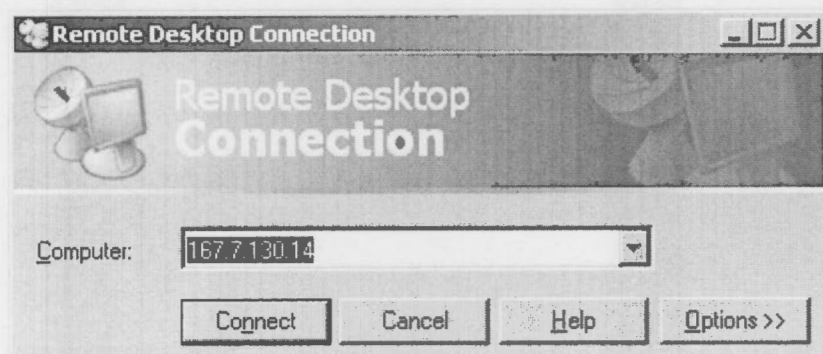
You will then be presented with the first of two logins necessary to make your connection, as shown below. **The username is the same as your Novell network login and should be typed in all lower case.** Tab or click on the password and enter your normal Netware login and append **"456VPN"** behind your normal password. **Your normal Novell password should be typed in lower case and the "VPN" should be in upper case.** Since we don't require secure passwords here on our network the value will be added to your normal password to allow for a little tighter security.



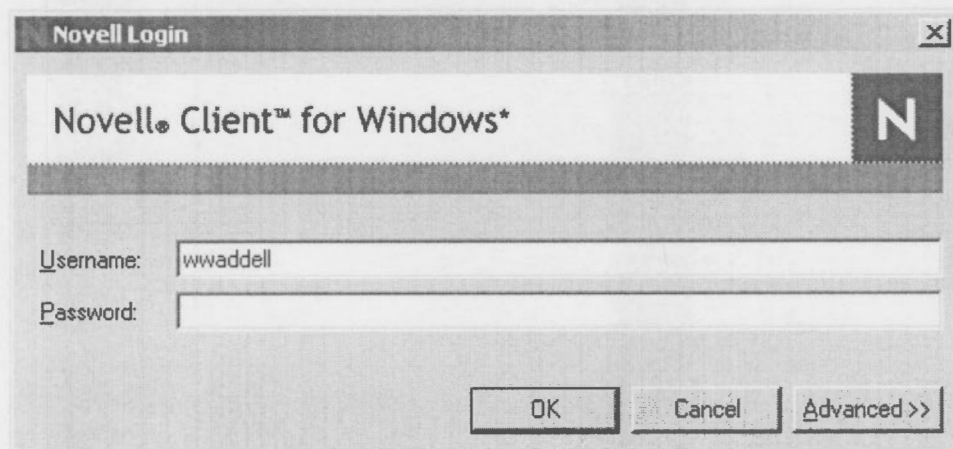
After a successful login you should then click on the shortcut that reads "MMO Terminal Server" and looks like below:



The login screen for this should look like below:



Click on "Connect" to be presented with the normal Netware login (see below). In the username box type your normal username (First initial and last name), then type your password that you normally use in the office environment. These values are not case sensitive.



After this login succeeds you will see the desktop of the server located at the Southtrust building. You should be able to use any files on the network that you can normally use in the workplace

Important: After you're finished with your connection click on "Start", then "Shutdown" and change the pulldown to "disconnect" to end your session.

Disconnecting your Connection:

The last step to conclude your connection involves a right click on the icon just above the text items below and a left click to disconnect. This will give internet access back to your PC and should operate as you originally connected to the internet.

